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PATENTS
112056-0141
P01-1626

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Re The Application of:
Peter F. Corbett et al.

Serial No.: 10/720,361

Filed: November 24, 2003

For: UNIFORM AND SYMMETRIC DOUBLE FAILURE CORRECTING TECHNIQUE FOR PROTECTING AGAINST TWO DISK FAILURES IN A DISK ARRAY

Examiner: Not yet assigned

Art Unit: Not yet assigned

Cesari and McKenna, LLP
88 Black Falcon Avenue
Boston, MA 02210
July 5, 2005

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Melissa L. Altman

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Sir:

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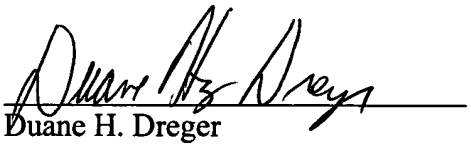
In keeping with the duty of candor and good faith owed to the Patent and Trademark Office, Applicants wish to bring to the Examiner's attention the references listed on the accompanying form PTO-1449. A copy of each listed reference is enclosed.

To the extent required by 37 C.F.R. §1.98(a)(3), Applicants have described what they consider to be the relevance of any foreign-language reference. The Office may find additionally relevant material in these or other references.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 6

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| Application Number | 10/720,361 |
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## U.S. PATENT DOCUMENTS

| Examiner Initials * | Cite No.[1] | U.S. Patent Document Number | U.S. Patent Document Kind Code[2] (if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|---|---|---|---|---|---|---|
| | 1 | Re. 34,100 | | Hartness | 10-13-1992 | |
| | 2 | 3,876,978 | | Bossen et al. | 04-08-1975 | |
| | 3 | 4,092,732 | | Ouchi | 05-30-1978 | |
| | 4 | 4,201,976 | | Patel | 05-06-1980 | |
| | 5 | 4,205,324 | | Patel | 05-27-1980 | |
| | 6 | 4,375,100 | | Tsuji et al. | 02-22-1983 | |
| | 7 | 4,467,421 | | White | 08-21-1984 | |
| | 8 | 4,517,663 | | Imazeki et al. | 05-14-1985 | |
| | 9 | 4,667,326 | | Young et al. | 05-19-1987 | |
| | 10 | 4,688,221 | | Nakamura et al. | 08-18-1987 | |
| | 11 | 4,722,085 | | Flora et al. | 01-26-1988 | |
| | 12 | 4,755,978 | | Takizawa et al. | 07-05-1988 | |
| | 13 | 4,761,785 | | Clark et al. | 08-02-1988 | |
| | 14 | 4,775,978 | | Hartness | 10-04-1988 | |
| | 15 | 4,796,260 | | Schilling et al. | 01-03-1989 | |
| | 16 | 4,817,035 | | Timsit | 03-28-1989 | |
| | 17 | 4,825,403 | | Gershenson et al. | 04-25-1989 | |
| | 18 | 4,837,680 | | Crockett et al. | 06-06-1989 | |
| | 19 | 4,847,842 | | Schilling | 07-11-1989 | |
| | 20 | 4,849,929 | | Timsit | 07-18-1989 | |
| | 21 | 4,849,974 | | Schilling et al. | 07-18-1989 | |
| | 22 | 4,849,976 | | Schillling et al. | 07-18-1989 | |
| | 23 | 4,870,643 | | Bultman et al. | 09-26-1989 | |
| | 24 | 4,899,342 | | Potter et al. | 02-06-1990 | |
| | 25 | 4,989,205 | | Dunphy, Jr. et al. | 01-29-1991 | |
| | 26 | 4,989,206 | | Dunphy, Jr. et al. | 01-29-1991 | |
| | 27 | 5,077,736 | | Dunphy, Jr. et al. | 12-31-1991 | |
| | 28 | 5,088,081 | | Farr | 02-11-1992 | |
| | 29 | 5,101,492 | | Schultz et al. | 03-31-1992 | |
| | 30 | 5,128,810 | | Halford | 07-07-1992 | |
| | 31 | 5,148,432 | | Gordon et al. | 09-15-1992 | |
| | 32 | 5,163,131 | | Row et al. | 11-10-1992 | |
| | 33 | 5,166,936 | | Ewert et al. | 11-24-1992 | |
| | 34 | 5,179,704 | | Jibbe et al. | 01-12-1993 | |
| | 35 | 5,202,979 | | Hillis et al. | 04-13-1993 | |

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Sheet 2 of 6

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| Group Art Unit | Not yet assigned |
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|---|---|---|---|---|---|---|
| | 36 | 5,208,813 | | Stallmo | 05-04-1993 | |
| | 37 | 5,210,860 | | Pfeffer et al. | 05-11-1993 | |
| | 38 | 5,218,689 | | Hotle | 06-08-1993 | |
| | 39 | 5,233,618 | | Glider et al. | 08-03-1993 | |
| | 40 | 5,235,601 | | Stallmo et al. | 08-10-1993 | |
| | 41 | 5,237,658 | | Walker et al. | 08-17-1993 | |
| | 42 | 5,257,367 | | Goodlander et al. | 10-26-1993 | |
| | 43 | 5,274,799 | | Brant et al. | 12-28-1993 | |
| | 44 | 5,305,326 | | Solomon et al. | 04-19-1994 | |
| | 45 | 5,351,246 | | Blaum et al. | 09-27-1994 | |
| | 46 | 5,410,667 | | Belsan et al. | 04-25-1995 | |
| | 47 | 5,537,567 | | Galbraith et al. | 07-16-1996 | |
| | 48 | 5,579,475 | | Blaum et al. | 11-26-1996 | |
| | 49 | 5,623,595 | | Bailey | 04-22-1997 | |
| | 50 | 5,805,788 | | Johnson | 09-08-1998 | |
| | 51 | 5,812,753 | | Chiariotti | 09-22-1998 | |
| | 52 | 5,862,158 | | Baylor et al. | 01-19-1999 | |
| | 53 | 5,884,098 | | Mason, Jr. | 03-16-1999 | |
| | 54 | 6,092,215 | | Hodges et al. | 07-18-2000 | |
| | 55 | 6,138,201 | | Rebalski | 10-24-2000 | |
| | 56 | 6,158,017 | | Han et al. | 12-05-2000 | |
| | 57 | 6,223,300 | B1 | Gotoh | 04-24-2001 | |
| | 58 | 6,532,548 | B1 | Hughes | 03-11-2003 | |
| | 59 | 6,581,185 | B1 | Hughes | 06-17-2003 | |
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|---|---|---|---|
| | 60 | ANVIN, PETER H, "*The Mathematics of RAID 6,*" December 2004 | |
| | 61 | Auspex 4Front NS2000, System Architecture, Network-Attached Storage For a New Millennium, Auspex Engineering Technical Report 24, January 1999 | |
| | 62 | BESTAVROS, AZER, ET AL., *Reliability and Performance of Parallel Disks,* Technical Memorandum 45312-891206-01TM, AT&T, Bell Laboratories, Department 45312, Holmdel, NJ, December 1989 | |
| | 63 | BITTON, DINA, *Disk Shadowing,* Proceedings of the 14th VLDB Conference, LA, CA (1988) | |
| | 64 | BULTMAN, DAVID L., *High Performance SCSI Using Parallel Drive Technology,* In Proc. BUSCON Conf., pages 40-44, Anaheim, CA, February 1988 | |
| | 65 | CHEN, PETER ET AL., *Two Papers on RAIDs.* Technical Report, CSD-88-479, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley (1988) | |
| | 66 | CHEN, PETER M., ET AL., *An Evaluation of Redundant Arrays of Disks Using an Amdahl 5890,* Performance Evaluation, pp. 74-85, 1990 – check to see if exact same copy as one in WAFL | |
| | 67 | CHEN, PETER M.., ET AL, Maximizing Performance in a Striped Disk Array, Proc. 1990 *ACM SIGARCH 17th Intern.* Symp. on Comp. Arch., Seattle, WA, May 1990, pp. 322-331. | |
| | 68 | CHEN, PETER M., ET AL., *RAID:High Performance, Reliable Secondary Storage,* ACM Computing Surveys, 26(2):145-185, June 1994 | |
| | 69 | CHERVENAK, ANN L., *Performance Measurement of the First RAID Prototype,* Technical Report UCB/CSD 90/574, Computer Science Division (EECS), University of California, Berkeley, May 1990 | |
| | 70 | COPELAND, GEORGE, ET AL., "*A Comparison of High-Availability Media Recovery techniques,*" in Proc. ACM-SIGMOD Int. Conf. Management of Data, 1989. | |
| | 71 | COURTRIGHT II, WILLIAM V., ET AL., *RAIDframe: A Rapid Prototyping Tool for RAID Systems,* Computer Science Technical Report CMU-CS97-142, Carnegie Mellon University, Pittsburgh, PA 15213, June 4, 1997 | |
| | 72 | EVANS *The Tip of the Iceberg:RAMAC Virtual Array – Part I,* Technical Support, March 1997, pp. 1-4 | |

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Sheet 4 of 6

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|---|---|---|---|
| | 73 | GIBSON, GARTH A., ET AL., *Coding Techniques for Handling Failures in Large Disk Arrays*, Technical Report UCB/CSD 88/477, Computer Science Division, University of California, (July, 1988.) | |
| | 74 | GIBSON, GARTH A., ET AL., *Failure Correction Techniques for Large Disk Arrays,* In Proceedings Architectural Support for Programming Languages and Operating Systems, Boston, Apr. 1989, pp 123-132 | |
| | 75 | GIBSON, GARTH A., ET AL., *Strategic Directions in Storage I/O Issues in Large-Scale Computing*, ACM Computing Survey, 28(4):779-93, December 1996 | |
| | 76 | GOLDICK, JONATHAN S., ET AL., *Multi-resident AFS: An Adventure in Mass Storage*, In Proceedings of the 1995 USENIX Technical Conference, pages 47-58, January 1995 | |
| | 77 | GRAHAM, SUSAN L., ET AL., *Massive Information Storage, Management, and Use,* (NSF Institutional Infrastructure Proposal), Technical Report No. UCB/CSD 89/493, January 1989 | |
| | 78 | GRAY, JIM ET AL., *Parity striping of disc arrays: Low-Cost Reliable Storage with Acceptable Throughput.* In Proceedings of the 16th Very Large Data Bases Conference, pages 148--161, Brisbane, Australia, 1990 | |
| | 79 | GRIMES, DW MARTINEZ, *Two Dimensional Parity Error Correction Procedure,* IBM Technical Disclosure Bulletin 2686-2689, October 1982 | |
| | 80 | GRIMES, DW MARTINEZ, *Vertical Parity Generator for Two Dimensional Parity,* IBM Technical Disclosure Bulletin 2682-2685, October 1982 | |
| | 81 | HELLERSTEIN, LISA, ET AL,. *Coding Techniques for Handling Failures in Large Disk Arrays.* In Algorithmica Vol. 2, Nr. 3, 182-208 (1994) | |
| | 82 | HUGHES, JAMES, ET AL., *High Performance RAIT* , Tenth NASA Goddard Conference on Mass Storage Systems and Technologies and Nineteenth IEEE Symposium on Mass Storage Systems, Adelphi, Maryland, USA, April 2002 | |
| | 83 | JOHNSON, THEODORE, ET AL, *Tape Group Parity Protection,* IEEE Symposium on Mass Storage, pp. 72-79, March 1999 | |
| | 84 | KATZ, RANDY H. ET AL., *Disk System Architectures for High Performance Computing*, undated | |
| | 85 | KENT, JACK ET AL., Optimizing Shadow Recovery Algorithms, *IEEE Transactions on Software Engineering*, 14(2):155-168, Feb. 1988. | |

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|---|---|---|---|
| | 86 | KIM, MICHELLE Y., *Synchronized Disk Interleaving*, IEEE Transactions on Computers, C-35(11):978-988, November 1986 | |
| | 87 | KIM, MICHELLE, ET AL., *Asynchronous Disk Interleaving Approximating Access Delays,* IEEE Transactions on Computers, vol. 40, no.7, July 1991 , pp. 801-810. | |
| | 88 | LAWLOR, F. D., *Efficient Mass Storage Parity Recovery Mechanism*, IBM Technical Disclosure Bulletin 24(2):986-987, July 1981 | |
| | 89 | LEE, EDWARD K., ET AL., *RAID-II: A Scalable Storage Architecture for High-Bandwidth Network File Service*, Technical Report UCB/CSD 92/672, (February 1992) | |
| | 90 | LI, DON, ET AL., *Authors' Reply*, IEEE Transactions on Communications, 46:575, May 1998. | |
| | 91 | LIVNY, MIRON, ET AL., *Multi-Disk Management Algorithms,* In Proceedings of the ACM International Conference on Measurement and Modeling of Computer Systems (SIGMETRICS), pages 69- 77, Banff, Alberta, Canada, May 1987 | |
| | 92 | MEADOR, WES E., *Disk Array Systems,* Proceedings of COMPCON, 1989, pp. 143-146 | |
| | 93 | NG, SPENCER, ET AL., *Trade-Offs Between Devices and Paths in Achieving Disk Interleaving,* IEEE International Symposium on Computer Architecture, 1988, pp. 196-201 | |
| | 94 | NG, SPENCER, *Some Design Issues of Disk Arrays,* Proceedings of COMPCON Spring '89, pages 137-42. IEEE, 1989 | |
| | 95 | PARK, ARVIN, ET AL., *Providing Fault Tolerance In Parallel Secondary Storage Systems,* Technical Report CS-TR-057-86, Princeton, November, 1986 | |
| | 96 | PATEL, ARVIND M., *Adaptive Cross-Parity (AXP) Code for a High-Density Magnetic Tape Subsystem,* IBM Technical Disclosure Bulletin 29(6):546-562, November 1985 | |
| | 97 | PATTERSON, D., ET AL., *A Case for Redundant Arrays of Inexpensive Disks (RAID),* Technical Report, CSD-87-391, Computer Science Division, Electrical Engineering and Computer Sciences, University of California at Berkeley (1987) | |
| | 98 | PATTERSON, D., ET AL., *A Case for Redundant Arrays of Inexpensive Disks (RAID),* SIGMOD International Conference on Management of Data, Chicago, IL, USA, 1-3 June 1988, SIGMOD RECORD (17)3:109-16 (Sept. 1988) | |

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| | 99 | PATTERSON, DAVID A., ET AL., *Introduction to Redundant Arrays of Inexpensive Disks (RAID).* In IEEE Spring 89 COMPCON, San Francisco, IEEE Computer Society Press, February 27 - March 3, 1989, pp. 112-117 | |
| | 100 | STORAGESUITE "Performance Without Compromise: The Virtual Storage Architecture,"catalogue, 1997 | |
| | 101 | REDDY, A. L. NARASIMHA, ET AL., *An Evaluation of Multiple-Disk I/O Systems,* IEEE Transactions on Computers, Vol. 38, No 12, December 1989, pp. 1680 - 1690. | |
| | 102 | SCHULZE, MARTIN E., *Considerations in the Design of a RAID Prototype,* Computer Science Division, Department of Electrical Engineering and Computer Sciences, Univ. of CA, Berkley, August 25, 1988 | |
| | 103 | SCHULZE, MARTIN., ET AL., *How Reliable is a RAID?,* Proceedings of COMPCON, 1989, pp. 118-123 | |
| | 104 | SHIRRIFF, KENNETH W., *Sawmill:A Logging File System for a High-Performance RAID Disk Array,* CSD-95-862, January 1995 | |
| | 105 | STONEBRAKER, MICHAEL, ET AL., *The Design of XPRS,* Proceedings of the 14th VLDB Conference, LA, CA (1988) | |
| | 106 | TANABE, TAKAYA, ET AL, *Redundant Optical Storage System Using DVD-RAM Library,* IEEE Symposium on Mass Storage, pp. 80-87, March 1999 | |
| | 107 | TEKROM – "About RAID 6" | |
| | 108 | TWETEN, DAVID, *Hiding Mass Storage Under UNIX: NASA's MSS-H Architecture,* IEEE Symposium on Mass Storage, pages 140-145, May 1990 | |
| | 109 | WILKES, JOHN, ET AL., *The HP AutoRAID hierarchical storage system,* ACM Transactions on Computer Systems, February 1996, vol. 14, pp. 108-36 | |
| | | | |
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| | | | |
| | | | |

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